

IN THE CLAIMS

1. (Currently Amended) A coil arrangement with variable inductance ~~having two comprising a first and a second separate toroid coils cores, (40, 42; 52, 54) which carry working windings (46, 48; 56, 58) said first toroid core carrying a first working winding and a second toroid core carrying a second working winding, each of said first and said second working windings wound on its respective toroid core, and a control winding (50; 60) encompassing the two would toroid coils wound on both the first and second toroid cores for the purpose of pre-magnetizing the core material of the first and second toroid coils cores (40, 42; 52, 54).~~
2. (Currently Amended) A coil arrangement according to claim 1, ~~characterized in that wherein~~ the toroid ~~coils cores~~ (40, 42) are arranged next to each other in such a way that their axes of symmetry (44) are in line.
3. (Currently Amended) A coil arrangement according to claim 2, ~~characterized in that wherein~~ the windings of the control winding (50) are distributed evenly over the circumference of the two toroid ~~coils cores~~ (40, 42).

4. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein the two toroid cores (52, 54) are arranged adjacent to each other in a common plane.

5. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein each of the toroid cores (40, 42; 52, 54) is wound with the working windings (46, 48; 56, 58) in a single layer.

6. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein each working winding (46, 48; 56, 58) is formed from a single insulated wire, a group of parallel non-twisted insulated wires or from a litz wire consisting of twisted single insulated wires.

7. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein each working winding (46, 48; 56, 58) is evenly distributed around the periphery of the respective toroid coil core.

8. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein the two toroids cores (40, 42; 52, 54) have identical dimensions and the two

working windings (46, 48; 56, 58) have essentially the same number of turns and identical wire thicknesses.

9. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein the working windings (46, 48; 56, 58) consist of a single wire or parallel non-twisted single wires, whereby the single wire thickness is not greater than three times the skin effect penetration depth of the working frequency.

10. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein the working windings (46, 48; 56, 58) are formed from a twisted litz wire with the diameter of the individual wires being not greater than the single skin effect penetration depth.

11. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein the working windings (46, 48; 56, 58) are connected in parallel and the winding direction of the working windings (46, 48; 56, 58) is chosen such that when a current flows in the working windings, the directions of its magnetic fields in the control coil core (50) point are opposite to each other.

12. (Currently Amended) A coil arrangement according to claim 1, characterized in that wherein the working windings (46, 48; 56, 58) are connected in series and the

winding direction of the working windings (46, 48; 56, 58) is ~~so~~ chosen so that when a current flows in the working windings, the directions of its magnetic fields in the control coil core (50) point in the opposite direction to each other.

13. (New) A coil arrangement with variable inductance comprising a first and a second toroid cores (40, 42; 52, 54), said first toroid core carrying a first working winding and a second toroid core carrying a second working winding, each of said first and said second working windings wound on a respective toroid core, and

a control winding (50; 60) wound on both the first and second toroid cores for pre-magnetizing the core material of the first and second toroid cores; wherein each of said first and second working windings is evenly distributed around the periphery of the respective toroid core.

14. (New) A coil arrangement according to claim 13, wherein the toroid cores (40, 42) are arranged next to align their axes of symmetry (44).

15. (New) A coil arrangement according to claim 14, wherein the windings of the control winding (50) are distributed evenly over the circumference of the two toroid cores (40, 42).